



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

5

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/027,451	12/20/2001	Mikio Onodera	9281-4255	1511	
7590 03/29/2004			. EXAMINER		
Brinks Hofer (Gilson & Lione		LEWIS, DA	AVID LEE	
Chicago, IL 60610			ART UNIT	PAPER NUMBER	

2673

DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application	n No.	Applicant(s)		
Office Action Summary		10/027,45	1	ONODERA ET AL.		
		Examiner		Art Unit		
		David L Lev	wis	2673		
Period fo	The MAILING DATE of this communication or Reply	n appears on the	cover sheet with the	correspondence address –		
A SH THE - Exte after - If the - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR R MAILING DATE OF THIS COMMUNICATION Insions of time may be available under the provisions of 37 CI SIX (6) MONTHS from the mailing date of this communication is period for reply specified above is less than thirty (30) days, operiod for reply is specified above, the maximum statutory pure to reply within the set or extended period for reply will, by reply received by the Office later than three months after the ed patent term adjustment. See 37 CFR 1.704(b).	ON. FR 1.136(a). In no ever on. a reply within the statut period will apply and will statute, cause the applic	nt, however, may a reply be ti tory minimum of thirty (30) da expire SIX (6) MONTHS fron cation to become ABANDONE	imely filed sys will be considered timely. In the mailing date of this communication. ED (35 U.S.C. § 133).		
Status						
1)[🔀	Responsive to communication(s) filed on	05 January 2004	<u>.</u>			
·		This action is no				
'=	S) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
.—	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposit	ion of Claims					
5)□ 6)⊠ 7)□	Claim(s) <u>1-5</u> is/are pending in the applicate 4a) Of the above claim(s) is/are with Claim(s) is/are allowed. Claim(s) <u>1-5</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction as	hdrawn from con				
Applicat	ion Papers					
9)[The specification is objected to by the Exa	miner.				
10)[The drawing(s) filed on is/are: a)	accepted or b)	objected to by the	Examiner.		
	Applicant may not request that any objection to	o the drawing(s) be	held in abeyance. Se	e 37 CFR 1.85(a).		
11)	Replacement drawing sheet(s) including the co The oath or declaration is objected to by the	•	-,,	•		
Priority (under 35 U.S.C. § 119					
12)□ a)	Acknowledgment is made of a claim for for All b) Some * c) None of: 1. Certified copies of the priority docur 2. Certified copies of the priority docur 3. Copies of the certified copies of the application from the International Businessee the attached detailed Office action for a	ments have been ments have been priority documer ureau (PCT Rule	received. received in Applicat nts have been receiv 17.2(a)).	tion No red in this National Stage		
Attachmen	• •		,			
1) Notice	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-94)	ο.	4) Interview Summary Paper No(s)/Mail D			
3) 🔲 Infon	mation Disclosure Statement(s) (PTO-1449 or PTO/Ser No(s)/Mail Date	B/08)		Patent Application (PTO-152)		

Art Unit: 2673

DETAILED ACTION

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-5 are provisionally rejected under the judicially created doctrine of double patenting over claims 1-9 of copending Application No. 10/038,002, now allowed. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: both applications teach of a manual input device comprising a plurality of centrically arranged knobs and one force feedback actuator, as found in claim 1, but particularly as expressed in claim 2, and with

Application/Control Number: 10/027,451

Art Unit: 2673

a second actuator as found in claim 6. The claims are not identical but sufficiently

similar.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 1. Claims 1-5 are rejected under 35 U.S.C. 102(a) as being anticipated by Levin et al. (6154201).
- 2. **As in claim 1, Levin et al. teaches of** a manual input device comprising a joystick type knob, **figure 3A and 18**, a rotary knob that are disposed coaxially with the joystick knob, **figure 3A and 18**, a first actuator to load an external force on the joystick type knob, **figure 8 item 70**, a second actuator to load an external force on the rotary knob, **column 21 lines 5-20**, **figure 8 item 70**, a first detector

Page 3

to detect an operation state of the joystick type knob, **figure 8 item 214**, and a second detector to detect an operation state of the rotary knob, **column 21 lines 5-20**, **figure 8 item 214**. Wherein Levin teaches of a haptic feedback device, figure 1 and figure 3A, that operates as a joystick 50 providing transverse motion in a direction 28 and rotary knob 18 providing rotational motion about the joystick shaft axis, such that the joystick/knob 50/18 rotates and translates, having sensors 214 to measure said rotation and translation, and actuators 70 to provide a force in both the rotational and translational degree of freedom, as found in claim 1. Said joystick knob and said rotary knob are one and the same, given its dual functionality and connection to two independent actuators.

3. As in clam 2, Levin et al. teaches of wherein further comprising a guide member to define an operation direction of the joystick type knob, figure 3A item 52, column 8 lines 40-50. As in clam 3, Levin et al. teaches of wherein further comprising a control unit that controls the first actuator based on a signal supplied from the first detector and controls the second actuator based on a signal supplied from the second detector, the control unit provided in a box that houses the manual input device, figure 8 item 202. As in clam 4, Levin et al. teaches of wherein further comprising a control unit that controls the first actuator based on a signal supplied from the first detector and controls the second actuator based on a signal supplied from the second detector, the control unit provided in an external apparatus, figure 8 item 224.

Application/Control Number: 10/027,451

Art Unit: 2673

4. As in clam 5, Levin et al. teaches of an onboard instrument control device, figure 1, comprising: electric instrument selection switches to select an electric instrument having a function to be controlled, column 4 lines 5-50; and a manual input device to control various functions of the electric instrument selected by use of one of the selection switches, the manual input device comprising a joystick type knob, figure 1 item 18, figure 3A, a rotary knob that is disposed coaxially with the rotary knob, figure 1 item 18, figure 3A, a first actuator to load an external force on the joystick type knob, figure 8 item 70, a second actuator to load an external force on the rotary knob, column 21 lines 5-20, figure 8 item 70, a first detector to detect an operation state of the joystick type knob, figure 8 item 214, and second detector to detect an operation state of the rotary knob, column 21 lines 5-20, figure 8 item 214. Wherein Levin teaches of a haptic feedback device, figure 1 and figure 3A, that operates as a joystick 50 providing transverse motion in a direction 28 and rotary knob 18 providing rotational motion about the joystick shaft axis, such that the joystick/knob 50/18 rotates and translates, having sensors 214 to measure said rotation and translation, and actuators 70 to provide a force in both the rotational and translational degree of freedom, as found in claim 5. Said joystick knob and said rotary knob are one and the same, given its dual functionality and connection to two independent actuators.

Application/Control Number: 10/027,451

Art Unit: 2673

Response to Arguments

5. Applicant's arguments with respect to claims 1-5 have been considered but are moot in view of the new ground(s) of rejection. Said joystick knob and said rotary knob are one and the same, given its dual functionality and connection to two independent actuators, meeting the limitation as amended. A terminal disclaimer is necessary to overcome the double patenting rejection over.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Page 6

Page 7

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David L Lewis whose telephone number is 703 306-3026. The examiner can normally be reached on M, T, TH, F. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 703 305-4938. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305-4700.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

dll

September 23, 2003

BIPIN SHALWALA SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 2600